



6560-50-P

## **ENVIRONMENTAL PROTECTION AGENCY**

### **40 CFR Part 52**

**[EPA-R06-OAR-2017-0056; FRL-9988-61-Region 6]**

### **Approval and Promulgation of Implementation Plans; Texas; Reasonable Further Progress Plan for the Houston-Galveston-Brazoria Ozone Nonattainment Area**

**AGENCY:** Environmental Protection Agency (EPA).

**ACTION:** Final rule.

**SUMMARY:** Pursuant to the Federal Clean Air Act (CAA or the Act), the Environmental Protection Agency (EPA) is approving a revision to the Texas State Implementation Plan (SIP) to meet the Reasonable Further Progress (RFP) requirements for the Houston-Galveston-Brazoria (HGB) moderate 2008 8-hour ozone nonattainment area (HGB area). EPA is approving the RFP demonstration, contingency measures, motor vehicle emissions budgets (MVEBs) and an updated 2011 base year emissions inventory.

**DATES:** This rule is effective on **[INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**.

**ADDRESSES:** The EPA has established a docket for this action under Docket ID No. EPA-R06-OAR-2017-0056. All documents in the docket are listed on the <http://www.regulations.gov> Web site. Although listed in the index, some information is not publicly available, *e.g.*, Confidential Business Information or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the Internet and will be publicly available only in hard copy form. Publicly available docket materials are available either

electronically through <http://www.regulations.gov> or in hard copy at the EPA Region 6, 1445 Ross Avenue, Suite 700, Dallas, Texas 75202-2733.

**FOR FURTHER INFORMATION CONTACT:** Ms. Wendy Jacques, 214-665-7395, [jacques.wendy@epa.gov](mailto:jacques.wendy@epa.gov).

**SUPPLEMENTARY INFORMATION:** Throughout this document “we,” “us,” and “our” means the EPA.

## **I. Background**

The background for this action is discussed in detail in our April 25, 2018 proposal (83 FR 17964). In that document we proposed to approve the RFP demonstration, contingency measures, MVEBs and an updated 2011 base year emissions inventory for the HGB area.

We received comments of support on the proposal from the Texas Commission on Environmental Quality and two relevant adverse comments from Environmental Integrity Project. Our response to the adverse comments are below.

## **II. Response to Comments**

**Comment:** Environmental Integrity Project commented that (1) it is unclear whether episodic emissions of ozone forming pollutants resulting from unplanned startups, shutdowns, maintenance, upsets and other unauthorized emissions are included in the Emissions Inventory ozone season daily nitrogen oxide (NO<sub>x</sub>) and volatile organic compound (VOC) values upon which the RFP plan is based and (2) to the extent that these values used to develop the baseline and future year emissions inventories do not include episodic emissions the RFP plan fails as a matter of law because the emissions inventories fail to include all actual emissions. The commenter notes that these emissions are quantifiable since companies report these episodic emissions to be included in TCEQ’s emission inventory. The commenter also noted that

researchers in the past have confirmed that these episodic emissions are important as they can sometimes result in large increases of ozone and are significant to the ozone problem in Houston and not including these episodic emissions in the RFP is erroneous. The commenter states that the RFP SIP must include a “comprehensive, accurate, current inventory of actual emissions from all sources.”

**Response:** CAA section 182(a)(1) requires states with ozone nonattainment areas to submit a SIP revision with a comprehensive, accurate, current inventory of actual emissions from all sources in an ozone nonattainment area in accordance with guidance provided by the Administrator. CAA section 182(b)(1) requires ozone nonattainment areas classified as Moderate and above to submit a RFP SIP revision. To implement CAA emissions inventory requirements for the 2008 ozone NAAQS we promulgated “Emissions inventory requirements” at 40 CFR 51.1115. The emissions values are required to be an average day’s emissions for a typical ozone season work weekday (40 CFR 51.1115(c) and 40 CFR 51.1100(cc)).

To implement the RFP requirements for the 2008 ozone NAAQS we promulgated “Requirements for reasonable further progress” at 40 CFR 51.1110. The values of the base year emissions inventory for RFP plans are to be an average day’s emissions for a typical ozone season work weekday (40 CFR 51.1110(b) and 40 CFR 51.1100(cc)).

Texas submitted a 2011 base year emissions inventory SIP revision for the HGB area on July 16, 2014 and we approved it as meeting the emissions inventory requirements for the 2008 ozone standard on February 20, 2015 (80 FR 9204). The RFP demonstration updated the previously approved emissions inventory with better estimates of an average day’s emissions for a typical ozone season work weekday. A summary of the update to the 2011 base year emissions inventory is found in table 1.

Table 1. Update to the 2011 Base Year Emissions Inventory for the HGB Area (Tons per Day)

<b>Source Category</b>	<b>Previous NO<sub>x</sub></b>	<b>Updated NO<sub>x</sub></b>	<b>Previous VOC</b>	<b>Updated VOC</b>
Point	108.44	108.33	94.83	95.99
Area	21.14	21.15	308.73	304.90
On-road Mobile	196.21	188.02	82.62	80.73
Non-road Mobile	121.11	142.44	49.93	49.78
Total	446.90	459.94	536.12	531.40

EPA's rules and guidance call for an estimate of typical ozone season day (summer weekday) emissions to set the RFP baseline. EPA's emission inventory guidance recommends including Startup, Shutdown, and Maintenance emissions in the RFP baseline and future year weekday ozone season day emission inventory values if the emissions can be reasonably and sufficiently quantified with regular and predictable emissions.<sup>1</sup> Similarly, Texas emission inventory guidance is to include all authorized/planned<sup>2</sup> Start-up, Shutdown and Maintenance emissions in the ozone season day emissions reported in annual emission inventories submitted by sources that are used by TCEQ for the RFP baseline and future year RFP inventories.<sup>3</sup> In their RFP SIP, TCEQ included authorized/planned Start-up, Shutdown, and Maintenance (SSM) emissions from 2011 in their 2011 baseline inventory and also included authorized/planned emissions that occurred in 2014 in the 2014 inventory that they used to project the 2017 future RFP inventory. Since the amount and magnitude of authorized/planned events varies from day to day, Texas includes the

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<sup>1</sup> "Emissions Inventory Guidance for Implementation of Ozone and Particulate Matter National Ambient Air Quality Standards (NAAQS) and Regional Haze Regulations"; EPA-454/B-17-003, July 2017; pages 79-80. And "Emissions Inventory Guidance for Implementation of Ozone and Particulate Matter National Ambient Air Quality Standards (NAAQS) and Regional Haze Regulations", EPA-454/B-17-003; July 2017, page 19, Section 2.5.2.

<sup>2</sup> The commenter discussed unplanned and unauthorized emissions and TCEQ guidance centers around authorized and non-authorized and does not use the unplanned/planned language. For this Response to Comment we are interpreting that the commenter was equating planned with authorized and unplanned with non-authorized.

<sup>3</sup> TCEQ RG-360A/11 "2011 Emission Inventory Guidelines" pages 65-70 and TCEQ RG-360A/14, "2014 Emission Inventory Guidelines" pages 70-72.

average value of these emissions in the RFP average weekday inventory.<sup>4</sup> So, Texas does include an estimate of authorized/planned Start-up, Shutdown, and Maintenance emissions.

Texas does not include unplanned startups, shutdowns, maintenance, upsets and other unauthorized emissions in their RFP inventories. This is consistent with EPA's guidance which states<sup>5</sup>: "Since malfunctions are, by nature, unpredictable and given the myriad different types of malfunctions that can occur, malfunction emissions would be difficult to estimate and future-year malfunction events cannot be readily predicted. Thus, states are not obligated to include malfunction emissions in the base inventory for the NAA, ROP/RFP plans, or attainment projected inventory for the NAA. However, to the extent that malfunctions become a regular and predictable event, then such emissions should be quantified with regular and predictable emissions and included in emission inventories for planning purposes. The elimination of high emissions during routinely reoccurring malfunctions could potentially help achieve significant emissions reductions needed by a state in attaining the relevant NAAQS." Malfunctions in EPA's terminology are very similar to unplanned events in TCEQ's regulatory structure. Because of the unpredictability and variability of unplanned and/or unauthorized emissions due to malfunctions, as explained in the EPA guidance it is reasonable that Texas did not include these emissions in its estimate of average ozone season weekday emissions.

Although these unauthorized emissions are not appropriate to be included in the RFP plan, TCEQ recognizes the importance of emissions from startups, shutdowns, maintenance, and upsets/malfunctions. These episodic emissions (planned and unplanned) are quantified and

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<sup>4</sup> Texas receives data on the hours that the emissions occurred for each occurrence and then totals the emissions during ozone season and divides by the total number of hours that these types of emissions occurred to yield an average emission rate (lb/hr that is translated to OSD) that is included in the RFP inventories.

<sup>5</sup> "Emissions Inventory Guidance for Implementation of Ozone and Particulate Matter National Ambient Air Quality Standards (NAAQS) and Regional Haze Regulations"; EPA-454/B-17-003, July 2017; page 80.

included in the attainment demonstration modeling which better lends itself for utilization of day to day variation of emissions because daily emissions from specific historic episodes are modeled versus typical ozone season day weekday emissions used in the RFP inventories.<sup>6</sup> Furthermore, based on the evolving knowledge about unplanned episodic emissions and the potential impacts on ozone levels, TCEQ has conducted a number of studies that have resulted in best management practice improvements for some point source categories to reduce episodic emission events.<sup>7</sup> For example, TCEQ's studies have included best management practice improvements for flaring, which is one of the sources related with malfunctions and that may have the potential to impact ozone levels. These best management practice improvements are expected to result in emission reductions, but EPA acknowledges that quantification of baseline and future year emission events and non-authorized/unplanned start-up, shutdown, and maintenance emissions (future year would be expected to be different than baseline) with the certainty required for a RFP SIP is not reasonably possible.

In sum, Texas's approach is consistent with our emissions inventory guidance regarding non-authorized/unplanned episodic/malfunction emissions. EPA believes these emissions can vary significantly and unpredictably from day to day and therefore it is acceptable these emissions not be included in the periodic emissions inventory required under 40 CFR 51.1115(b) or the emissions inventory for RFP purposes. We note Texas recognizes the importance of these emissions and has undertaken efforts to reduce episodic emissions. In conclusion, TCEQ has

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<sup>6</sup> EPA-R06-OAR-2017-0053-0004; "Appendix B: EMISSIONS MODELING FOR THE HGB ATTAINMENT DEMONSTRATION SIP REVISION FOR THE 2008 EIGHT-HOUR OZONE STANDARD"

<sup>7</sup> For a discussion of the studies please see pages 248-251 of the Technical Support Document for the Houston Galveston Brazoria Modeling and Other Analyses Attainment Demonstration (HGB-MOAAAD) at <https://www.regulations.gov/document?D=EPA-R06-OAR-2013-0387-0002>. Also see documents available at [https://www.tceq.texas.gov/airquality/stationary-rules/stakeholder/flare\\_stakeholder.html](https://www.tceq.texas.gov/airquality/stationary-rules/stakeholder/flare_stakeholder.html).

met the requirements of 40 CFR 51.1110, 40 CFR 51.1115 and sections 182(a)(1) and 182(b)(1) of the CAA.

**Comment:** Environmental Integrity Project also stated that we may not rely on motor vehicle emissions reductions that we intend to discontinue. The comment stated that the single largest anticipated vehicle emissions reduction is from the Federal Motor Vehicle Control Program (FMVCP) and referred to an April announcement that we would work with the National Highway Traffic Safety Administration to revise the greenhouse gas (GHG) emissions standards and Corporate Average Fuel Economy (CAFE) standards for model year 2022 and 2025 light-duty vehicles.

**Response:** EPA agrees that SIPs can only rely upon reductions that are enforceable for the purpose and years addressed by the SIP. However, it is incorrect that the RFP SIP relies on motor vehicle emissions reductions that we intend to discontinue. The RFP SIP addresses NO<sub>x</sub> and VOC emission levels for the year 2011 to 2018, and during that time period the SIP relies on NO<sub>x</sub> and VOC emission reductions that have already occurred. In the case of the contingency measure reductions, these are expected to occur in 2018 due to regulations that have been implemented. In addition, it is important to note that the SIP relies upon EPA's emissions standard regulations which reduce criteria pollutant emissions. The GHG regulations cited by the commenter do not affect criteria pollutant emissions standards and are also not related to the years addressed by the SIP.

### **III. Final Action**

We are approving the HGB RFP SIP revision submitted on December 29, 2016, to meet the RFP requirements for the HGB moderate 2008 8-hour ozone nonattainment area as well as an

updated 2011 base year emissions inventory for the 2008 Ozone NAAQS. This action is being taken under section 110 of the Act.

#### **IV. Statutory and Executive Order Reviews**

Under the CAA, the Administrator is required to approve a SIP submission that complies with the provisions of the Act and applicable Federal regulations. 42 U.S.C. 7410(k); 40 CFR 52.02(a). Thus, in reviewing SIP submissions, the EPA's role is to approve state choices, provided that they meet the criteria of the CAA. Accordingly, this action merely approves state law as meeting Federal requirements and does not impose additional requirements beyond those imposed by state law. For that reason, this action:

- Is not a "significant regulatory action" subject to review by the Office of Management and Budget under Executive Orders 12866 (58 FR 51735, October 4, 1993) and 13563 (76 FR 3821, January 21, 2011);
- Is not an Executive Order 13771 (82 FR 9339, February 2, 2017) regulatory action because SIP approvals are exempted under Executive Order 12866;
- Does not impose an information collection burden under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 *et seq.*);
- Is certified as not having a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*);
- Does not contain any unfunded mandate or significantly or uniquely affect small governments, as described in the Unfunded Mandates Reform Act of 1995 (Public Law 104-4);
- Does not have Federalism implications as specified in Executive Order 13132 (64 FR 43255, August 10, 1999);

- Is not an economically significant regulatory action based on health or safety risks subject to Executive Order 13045 (62 FR 19885, April 23, 1997);
- Is not a significant regulatory action subject to Executive Order 13211 (66 FR 28355, May 22, 2001);
- Is not subject to requirements of section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) because application of those requirements would be inconsistent with the CAA; and
- Does not provide EPA with the discretionary authority to address, as appropriate, disproportionate human health or environmental effects, using practicable and legally permissible methods, under Executive Order 12898 (59 FR 7629, February 16, 1994).

In addition, the SIP is not approved to apply on any Indian reservation land or in any other area where EPA or an Indian tribe has demonstrated that a tribe has jurisdiction. In those areas of Indian country, the rule does not have tribal implications and will not impose substantial direct costs on tribal governments or preempt tribal law as specified by Executive Order 13175 (65 FR 67249, November 9, 2000).

The Congressional Review Act, 5 U.S.C. 801 *et seq.*, as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress and to the Comptroller General of the United States. EPA will submit a report containing this action and other required information to the U.S. Senate, the U.S. House of Representatives, and the Comptroller General of the United States prior to publication of the rule in the **Federal Register**. A major rule cannot take effect until 60 days

after it is published in the **Federal Register**. This action is not a “major rule” as defined by 5 U.S.C. 804(2).

Under section 307(b)(1) of the Clean Air Act, petitions for judicial review of this action must be filed in the United States Court of Appeals for the appropriate circuit by **[INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**.

Filing a petition for reconsideration by the Administrator of this final rule does not affect the finality of this action for the purposes of judicial review nor does it extend the time within which a petition for judicial review may be filed, and shall not postpone the effectiveness of such rule or action. This action may not be challenged later in proceedings to enforce its requirements.

(See section 307(b)(2).)

#### **List of Subjects in 40 CFR Part 52**

Environmental protection, Air pollution control, Incorporation by reference, Nitrogen dioxide, Ozone, Reporting and recordkeeping requirements, Volatile organic compounds.

Dated: February 6, 2019.

**Anne Idsal,**  
*Regional Administrator, Region 6.*

40 CFR part 52 is amended as follows:

**PART 52—APPROVAL AND PROMULGATION OF IMPLEMENTATION PLANS**

1. The authority citation for part 52 continues to read as follows:

**Authority:** 42 U.S.C. 7401 *et seq.*

**Subpart SS – Texas**

2. In §52.2270(e), the second table titled “EPA Approved Nonregulatory Provisions and Quasi-Regulatory Measures in the Texas SIP” is amended by adding an entry at the end for “HGB Area Reasonable Further Progress (RFP) Plan, RFP Contingency Measures, RFP Motor Vehicle Emission Budgets for 2017, and Revised 2011 Base Year Emissions Inventory for the 2008 Ozone NAAQS” to read as follows:

**§52.2270 Identification of plan.**

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**EPA APPROVED NONREGULATORY PROVISIONS AND QUASI-REGULATORY MEASURES IN THE  
TEXAS SIP**

Name of SIP provision	Applicable geographic or nonattainment area	State submittal/ effective date	EPA approval date	Comments
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HGB Area Reasonable Further Progress (RFP) Plan, RFP Contingency Measures, RFP Motor Vehicle Emission Budgets for 2017, and Revised 2011 Base Year Emissions Inventory for the 2008 Ozone NAAQS	Brazoria, Chambers, Fort Bend, Galveston, Harris, Liberty, Montgomery and Waller Counties, TX	12/29/2016	<b>[Insert date of publication in the Federal Register], [Insert Federal Register citation]</b>	
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[FR Doc. 2019-02021 Filed: 2/12/2019 8:45 am; Publication Date: 2/13/2019]